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09/997,442	11/29/2001	Herbert J. Tarenskeen	10185	3435

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EXAMINER
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FLEURANTIN, JEAN B

ART UNIT	PAPER NUMBER
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2162

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08/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

09/997,442

Applicant(s)

TARENSKEEN ET AL.

Examiner

JEAN B. FLEURANTIN

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

*Response to Amendment*

1. This in response to the election/amendment submitted on 5/17/2007.

The following is the current status of claims:

Claims 1-9 have been withdrawn.

Claims 10- 30 remain pending for further examination.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 43-64 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106:

As per independent claim 22

The independent claim 22 is directed to a method of migrating data from a first source table in a first database system to a second database system, in which inserting rows of the temporary tables into a target table. Therefore, the mechanism for archiving and restoring procedure involves transferring data from the source database system to a storage medium as the purpose of the invention. The claimed subject matter lacks a practical application of a judicial exception (law of nature, abstract idea, naturally occurring article/phenomenon) since it fails to produce a useful and tangible result.

The dependent claims are rejected under the same rational.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-12 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to Bohm et al., ("Bohm").

As per claim 10, Abrams discloses "a method of migrating data" (i.e., migrating data; see col. 5, lines 30-31) comprising:

"archiving data from a source table in a source database system" (i.e., archiving data; see col. 19, lines 5-17);

"transferring groups of the archived data, in parallel to corresponding temporary tables in a target database system" (i.e., loading data into temporary table; see col. 12, lines 5-8 and Fig. 4);

"inserting data from the temporary tables into a target table in the target database system" (i.e., loading data into temporary table; see col. 12, lines 5-22 and Fig. 4);

Abrams fails to explicitly disclose making data in the target table available for execution of database queries against the data. However, Bohm discloses making data in the target table available for execution of database queries against the data (see Bohm col. 2, lines 4-5 and col. 2, lines 22-25).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Abrams by making data in the target table available for execution of database queries against the data as disclosed by Bohm (see Bohm Fig. 3, items 306-307). Such a modification would allow the method of Abrams to provide cost effective and still assure uniformity of

results, it is desirable to automate the process of finding specific records of items in databases (see Bohm col. 1, lines 45-47), therefore, improving the accuracy of the parallel migration of data between systems.

As per claim 11, in addition to claim 10, Abrams further discloses "archiving the data using a plurality of concurrently active archive modules" (i.e., migrating data; see col. 15, lines 34-38).

As per claim 12, Abrams discloses "transferring the groups of data comprises restoring the groups of data, in parallel, using a plurality of restore modules" (i.e., loading data into temporary table; see col. 12, lines 5-8 and Fig. 4).

As per claim 15, Abrams discloses "communicating through an intermediate storage system" (see Fig. 4 and col. 11, lines 57-67).

As per claim 16, Abrams discloses "storing the source table across plural access manager, each access manager managing access to respectively portions of the source table" (i.e., reading data migration; see col. 15, lines 52-56).

As per claim 17, in addition to claim 1, Abrams further discloses "data associated with a respective set of plural access managers" (i.e., conditions associating; see col. 17, lines 50-54).

As per claim 18, Abrams discloses "copying database definitions from the source database system to the target database system" (i.e., migrating data; see col. 15, lines 10-20).

As per claim 19, Abrams discloses "creating temporary tables in the target database using the copied database definitions" (i.e., creating table; see col. 6, lines 34-37).

As per claim 20, in addition to claim 10, Abrams further discloses "transferring groups of archived data from the second source table, in parallel, to corresponding second set of temporary tables in the target database system" (see Figs. 4 and 5 and corresponding texts).

As per claim 21, Abrams discloses "inserting data from the second set of temporary tables into the second target table in the target database system" (see Fig. 4 and corresponding text).

As per claims 22-25, the limitations of claims 22-25 are similar to claims 10-21, therefore, the limitations of claims 22-25 are rejected in the analysis of claims 10-21, thus, these claims are rejected on that basis.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to et al., ("Bohm"), as applied to claims 10-12 and 15-25, and further in view of U.S. Patent No. 6,651,074 issued to Taylor ("Taylor").

As per claims 13 and 14, in addition to claim 10, Abrams fails to explicitly disclose communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium; communicating across a pipe defined by an operating system in one of the source database system and the target database system. However, Taylor discloses communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium (i.e., the archive utility as Fig. 2, elements 22, 30, 34 and 36); communicating across a pipe defined by an operating system in one of the source database system and the target database system (i.e., data stream 38 from a database export command of a DBMS 22 is piped into an intelligent pipe reading process 30 and distributed over a set of temporary data stores 34 built from raw storage resources 36; see col. 4, lines 52-55; Fig. 2, elements 38, 30, 39 and 18).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of Abrams by communicating the groups of data between respective pairs of archive modules and restore modules across a transfer medium; communicating across a pipe defined by an operating system in one of the source database system and the target database system as disclosed by Taylor (see Taylor Fig. 2). Such a modification would allow the method of Abrams to provide a standard mechanism that can be used by processes that do not have to share a common process origin for process-to-process-to-device transfers of large amounts of data (see Taylor col. 2, lines 56-59), therefore, improving the accuracy of the parallel migration of data between systems.

Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,151,608 issued to Abrams, ("Abrams") in view of U.S. Patent No. 5,404,507 issued to et al., ("Bohm"), and further in view of U.S. Patent No. 6,651,074 issued to Taylor ("Taylor"), as applied to claims 10-12 and 15-25 above, and further in view of US Patent No. 5,084,789 issued to Kamo et al., ("Kamo").

As per claim 26, in addition to claim 10, while the combination of Abrams/Bohm substantially discloses the claimed invention, the combination fails to disclose in detail "parallel transfer of groups... " However, Kamo discloses parallel transfer of groups (see Kamo col. 2, lines 36-43). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the system of Abrams/Bohm by parallel transfer as disclosed by Kamo (see Kamo col. 17, lines 10-15). Such a modification would allow the system of Abrams/Bohm provide an access to an alternate track for a defective track can be facilitated at the time of parallel transfer (see Kamo col. 7, lines 36-37).

As per claims 27-30, the limitations of claims 27-30 are similar to claims 10-21, therefore, the limitations of claims 27-30 are rejected in the analysis of claims 10-21, thus, these claims are rejected on that basis.

*Response to Arguments*

Applicant's arguments submitted on 05/17/2007 have been fully considered but they are not persuasive because of the new ground 35 U.S.C. 101 and 103 rejections of claims.

In response to applicant's arguments, page 6, paragraph 3, that "In the current action, the Office appears to have undone the first restriction requirement by reinstating claim 31. The action states clearly that claims 1-9 have been withdrawn and that claims 10-31 remain pending. In the claim rejections, the Office has examined (and rejected) claim 31 with the other pending claims (10-30). Therefore, Applicant assumes that claim 31 has been reinstated."

It is clearly indicated in the **Office action mailed 7/18/2006**. Claims 1-30 remain pending for examination.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, drawn to database, classified in class 707, subclass 1.
- II. Claims 10-30, drawn to a method of archiving, classified in class 707, subclass 204.

Applicant(s) Response: **dated 8/21/2006**

Clearly stated that:

The following election is made in response to the Restriction Requirement dated July 18, 2006, wherein the Examiner required a restriction to one of the following inventions:

- I. Claims 1-9, drawn to a database, classified in class 707, subclass 1.
- II. Claims 10-30, drawn to a method of archiving, classified in class 707, subclass 204.

The restriction requirement states that the inventions of Groups I and II are related as subcombinations disclosed as usable together in a single combination.

In response to the requirement for restriction, Group II is elected and claims 10-30 are submitted to be examinable with the elected Group.

Both the restriction requirement and the applicant's response to the Restriction requirement clearly indicate that only claims 1-30 were involved in the Election/Restriction Requirement. With claims



1-9 and claims 10-30 drawn to two distinct inventions. Thus, it was a mere typographical error that the Examiner had inadvertently mentioned claim 31 in the prior rejection. Thus, the Examiner apologizes for the typographical error and makes it clear claim 31 has not been reinstated.

It is noted, the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999).

### CONTACT INFORMATION

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN B. FLEURANTIN whose telephone number is 571 – 272-4035. The examiner can normally be reached on 7:05 to 4:35.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 571 – 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean Bolte Fleurantin

Patent Examiner

Technology Center 2100

2007-08-02